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# Water Supply Outlook For Idaho



SOIL CONSERVATION SERVICE  
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS  
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF  
MAR. 1, 1980

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*COVER PHOTO: THE SNOWTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.*

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



# **WATER SUPPLY OUTLOOK FOR IDAHO**

and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**

*Issued by*

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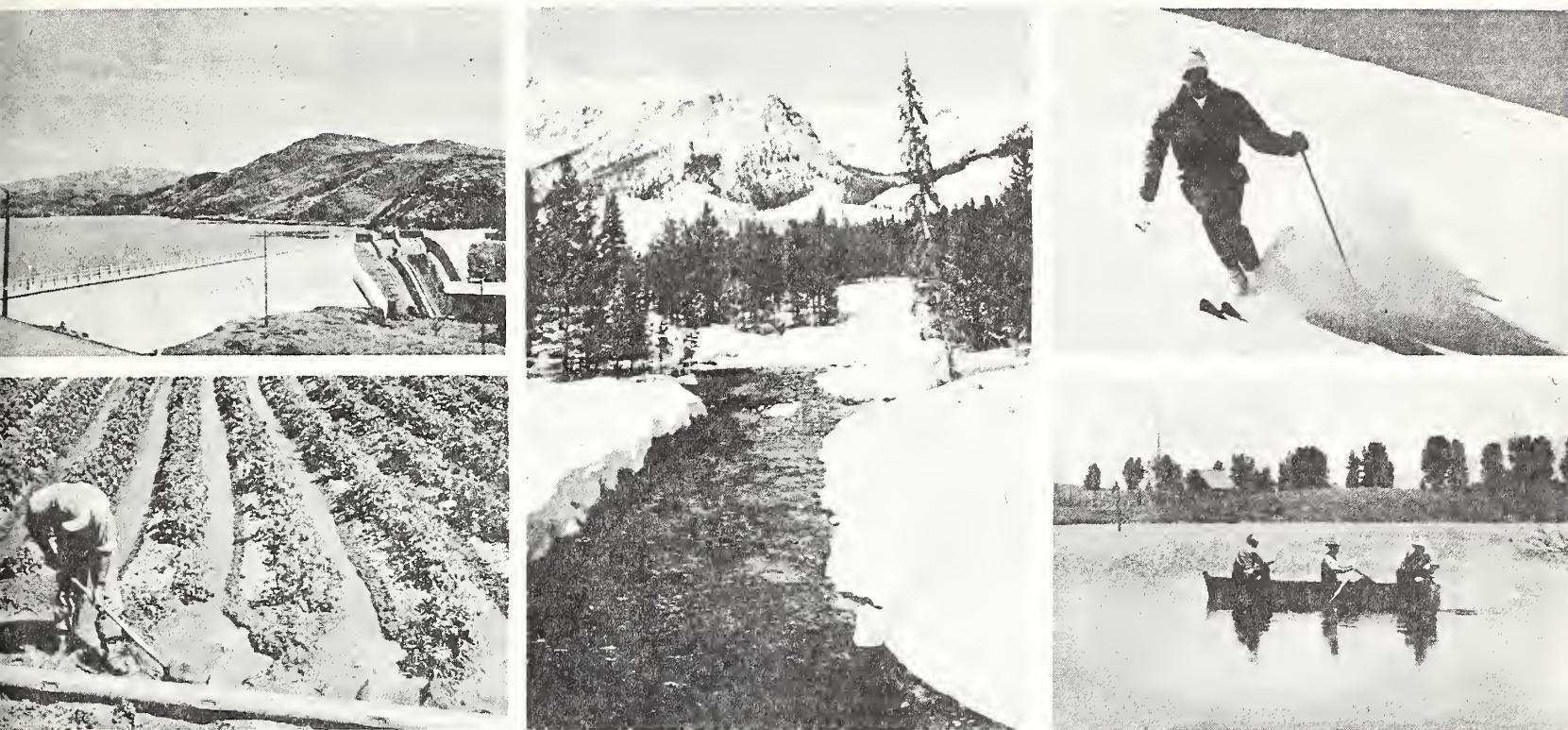
*Report prepared by*

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BOISE, IDAHO 83702



# WATER SUPPLY OUTLOOK for IDAHO



## GENERAL SUMMARY FOR MARCH 1, 1979

In general, fair to good water supply is the outlook for the 1980 season. Exceptions to this are some small low elevation streams with no storage facilities such as the Palouse River where shortages are probable.

Forecasts of seasonal runoff range from 67 percent of normal for the Spokane River at Post Falls to 113 percent of average for Montpelier Creek near Montpelier. Proper management of available water should insure adequate supplies for most areas. Due to rain at lower elevations and warm temperatures, soil moisture at low elevations has improved markedly. Middle elevations are beginning to show improvement but high elevation soil is still dry and will absorb a considerable amount of water when snowmelt starts.

Water equivalent of the snowpack in relation to normal remained static or showed improvement throughout the state except for the Spokane and Priest River watersheds in North Idaho and the Blackfoot, Portneuf and some Great Basin drainages in the Southeast which showed a slight decline. The snowpack is extremely variable ranging from a low of 37 percent of normal on the Palouse watershed to highs of 127 percent and 129 percent of average for Jordan Creek in the Southwest and Malad River in the Southeast respectively.

In general reservoir storage has improved during February and most reservoirs are expected to fill. Filling will depend to a great extent on climatic conditions for the remainder of the spring season and on irrigation demands.

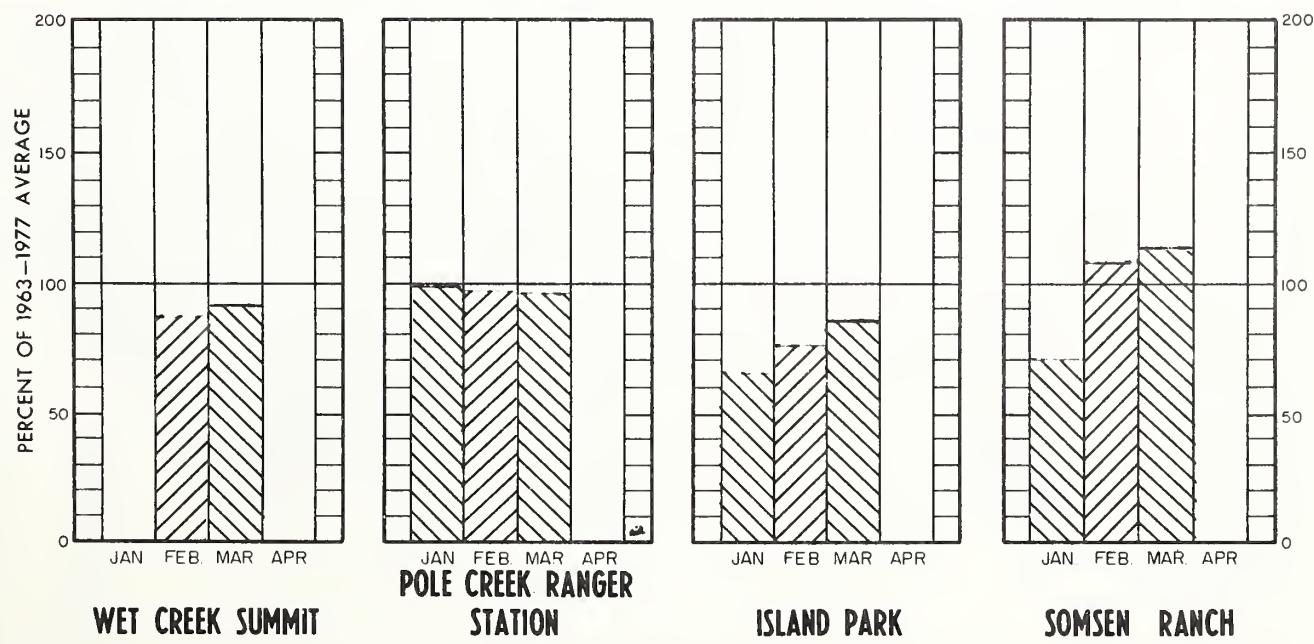
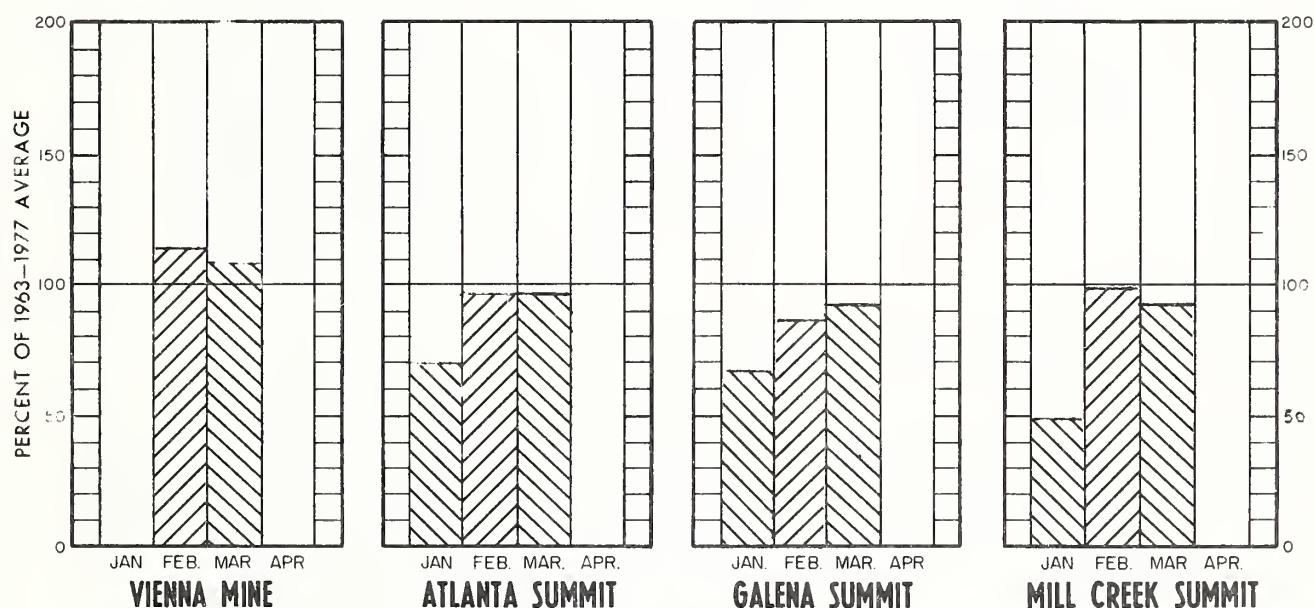
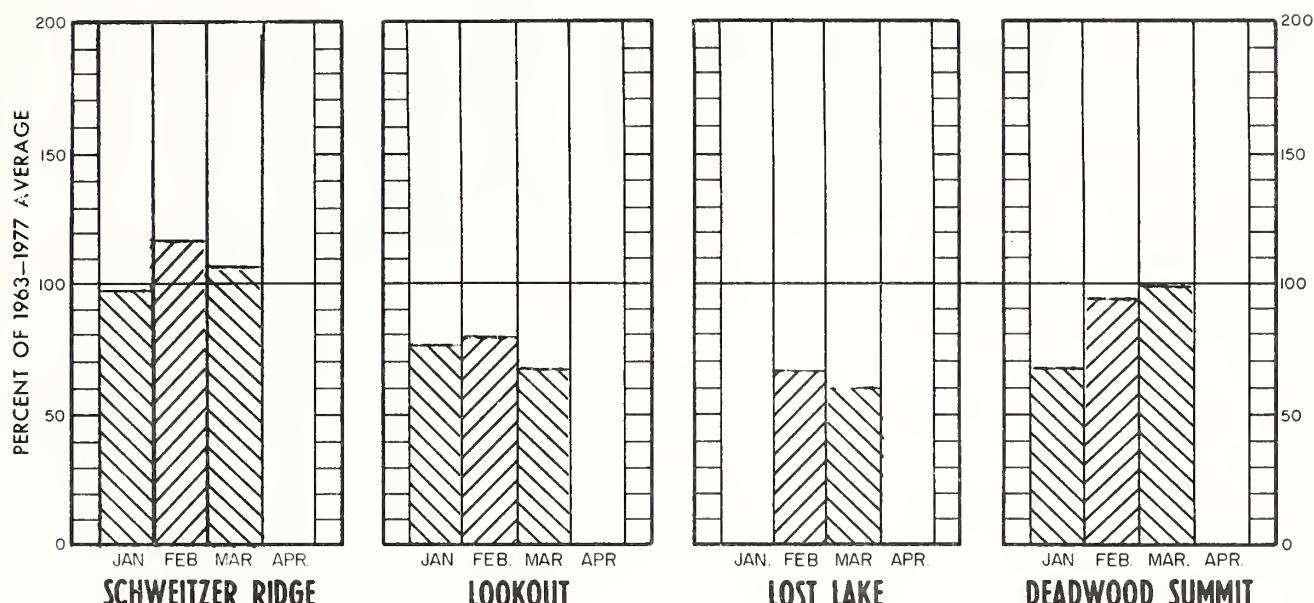
The National Weather Service reports that precipitation averaged above normal for February in Idaho. The average was 115 percent of normal with a range from 64 percent at Kellogg and 97 percent at Porthill to 148 percent at Salmon and 152 percent at Grangeville. For the water year the State stands at 98 percent of normal.

Temperature averages are from 2° F. above normal in Northern Idaho to 5° F. above in Southern Idaho.

# SNOW WATER DEPTHS ACCUMULATION For Selected Snow Courses

As Compared To 1963 - 1977 15 Year Average

MARCH 1, 1980



## COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1963-77 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Kootenai River	38	95	77
Pend Oreille River	109	72	71
Clark Fork River	76	70	71
Flathead River	38	76	71
Priest River	4	102	88
Spokane River	12-13	62	61
Hayden Lake Drainage	4	34	-
<u>LOWER SNAKE RIVER BASIN</u>			
Palouse River	5	26	37
Clearwater River	16-19	74	66
Salmon River	26-27	119	94
Lemhi River	6	120	100
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	5-6	114	99
Big Lost River	7	175	111
Fish Creek	2	112	115
Little Wood River	4	151	109
Big Wood River	10	147	104
Boise River	16	130	101
Canyon Creek	3	113	98
Payette River	14	124	99
Weiser River	6	96	88
Mann Creek	4	101	96
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	5-7	105	96
Goose-Trapper Creek	2-5	106	106
Salmon Falls Creek	9	101	107
Bruneau River	5	108	108
Owyhee River	6	80	117
Jordan Creek	3	96	123
<u>UPPER SNAKE RIVER BASIN</u>			
Snake Basin - Above Palisades Res.	22	78	86
Camas-Beaver Creeks	2	82	72
Henrys Fork River	7	89	87
Teton River	9	71	84
Willow Creek	4-8	103	105
Blackfoot River	3	93	113
Portneuf River	4	104	111
<u>GREAT BASIN</u>			
Bear River - Upper	4	104	112
Bear River - Lower	14	95	108
Montpelier Creek	6	96	106
Mink Creek	7	100	113
Cub River	3-4	92	106
Malad River	4-6	103	129

SNOW WATER DEPTHS  
As percent of 1963-77 15 year average

MARCH 1, 1980

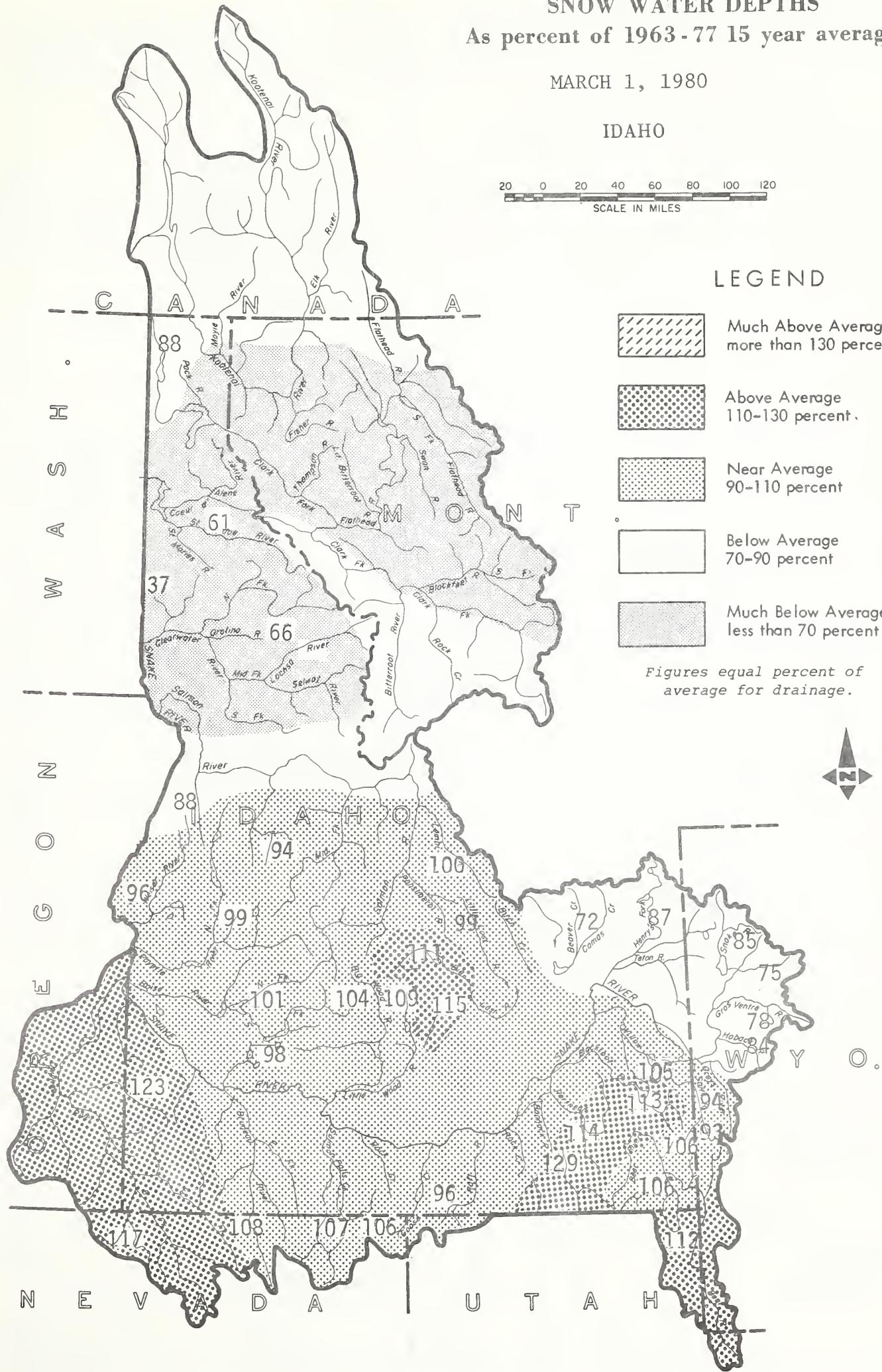
IDAHO

20 0 20 40 60 80 100 120  
SCALE IN MILES

LEGEND

-  Much Above Average  
more than 130 percent
-  Above Average  
110-130 percent.
-  Near Average  
90-110 percent
-  Below Average  
70-90 percent
-  Much Below Average  
less than 70 percent

Figures equal percent of  
average for drainage.



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
<u>UPPER COLUMBIA BASIN</u>				
<u>Clark Fork - Pend Oreille</u>				
Hungry Horse	3428.0	2430.0	2236.0	2200.0
Flathead	1791.0	636.2	625.6	994.6
Pend Oreille	1155.1	155.0	135.0	376.0
Noxon	334.6	264.4	310.3	299.1
<u>Spokane</u>				
Coeur d'Alene	225.1	79.5	70.5	121.6
<u>SNAKE BASIN</u>				
<u>Snake</u>				
Jackson Lake	624.4	547.8	559.8	615.6
Palisades	1200.0	909.3	987.9	903.6
American Falls	1673.0	1364.0	1395.8	1241.9
Island Park	127.0	103.4	99.9	114.6
Grassy Lake	15.2	11.5	12.8	10.6
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	40.1	35.1	29.3
<u>Salmon Falls Creek</u>				
Salmon Falls Creek	182.6	48.1	35.9	55.5
<u>Big Lost</u>				
Mackay	44.2	26.2	41.0	32.4
<u>Big Wood</u>				
Magic	191.5	29.0	116.0	113.9
<u>Little Wood</u>				
Little Wood	30.0	15.9	22.5	17.8
<u>Fish Creek</u>				
Carey Valley	14.4	3.0	5.3	--
<u>Boise</u>				
Anderson Ranch	423.2	213.3	319.4	256.5
Arrowrock	286.6	279.7	277.8	251.4
Lucky Peak	278.2	47.0	82.9	87.1
Lake Lowell (Deer Flat)	169.0	90.8	133.7	132.6
<u>Owyhee</u>				
Owyhee	715.0	629.9	598.8	491.3
<u>Payette</u>				
Cascade	653.2	279.5	362.4	338.8
Deadwood	161.9	59.9	84.0	85.9
<u>Weiser</u>				
Mann Creek	11.1	8.0	4.2	--
<u>Clearwater</u>				
Dworschak	2016.0	805.6	328.1	--
<u>GREAT BASIN</u>				
<u>Bear</u>				
Bear Lake	1421.0	1007.9	1025.1	1030.6

## RESERVOIR STORAGE

### USABLE CONTENTS (1,000 Acre Feet)

MARCH 1, 1980

50      0      50      100      150  
SCALE IN MILES

264.4  
NOXON  
334.6

2430.0  
HUNGRY HORSE  
3428.0

Contents  
RESERVOIR  
Capacity

264.4  
PEND OREILLE  
11551

79.5  
COEUR D'ALENE  
225.1

59.9  
DEADWOOD  
161.9

279.5  
CASCADE  
653.2

630.4  
BROWNLEE  
980.2

629.9  
OWYHEE  
715.0

90.8  
LAKE LOWELL  
169.0

47.0  
LUCKY PEAK  
278.2

279.7  
ARROWROCK  
286.6

213.3  
ANDERSON RANCH  
423.2

805.6  
DWORSHAK DAM  
2016.0

26.2  
MACKAY  
44.2

103.4  
ISLAND PARK  
127.0

11.5  
GRASSY LAKE  
15.2

547.8  
JACKSON LAKE  
624 4

909.3  
PALISADES  
12000

1364.0  
AMERICAN FALLS  
1673.0

1007.9  
BEAR LAKE  
1421.0

15.9  
LITTLE WOOD  
30.0

40.1  
OAKLEY  
74 4

29.0  
MAGIC  
191.5



## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST <sup>C</sup>		FORECAST PERIOD	THOUSAND ACRE FEET
	Thousand Acre Feet	Percent of Average		Last Year

UPPER COLUMBIA BASINKOOTENAI RIVER

Leonia	(at)	7270	82	Apr-Sep	--	8858
		6320	82	Apr-Jul	--	7708
		5050	82	Apr-Jun	--	6144

PEND OREILLE RIVERClark Fork River

Whitehorse Rapids	(at)	9420	67	Apr-Sep	--	13781
		8390	67	Apr-Jul	--	12519
		7100	67	Apr-Jul	--	10633

Priest River

Priest River <u>1/</u>	(at)	760	90	Apr-Jul	--	841
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SPOKANE RIVER

Post Falls <u>2/</u>	(at)	2000	67	Apr-Sep	--	2910
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St. Joe River

Calder	(at)	890	68	Apr-Sep	--	1309
		840	68	Apr-Jul	--	1238

SNAKE RIVER BASINSNAKE RIVER - MAIN STEM

Moran <u>3/</u>	(at)	750	83	Apr-Sep	--	903
Palisades Inflow		3250	84	Apr-Sep	--	3863
Heise <u>4/</u>	(nr)	3450	81	Apr-Sep	--	4247
Blackfoot <u>5/</u>	(nr)	3755	82	Apr-Jul	--	4579

Henrys Fork

Ashton <u>6/</u>	(nr)	585	79	Apr-Sep	--	737
Rexburg <u>7/</u>	(nr)	1210	79	Apr-Sep	--	1534

Portneuf River

Topaz	(at)	100	93	Mar-Sep	--	108
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Oakley Reservoir Inflow

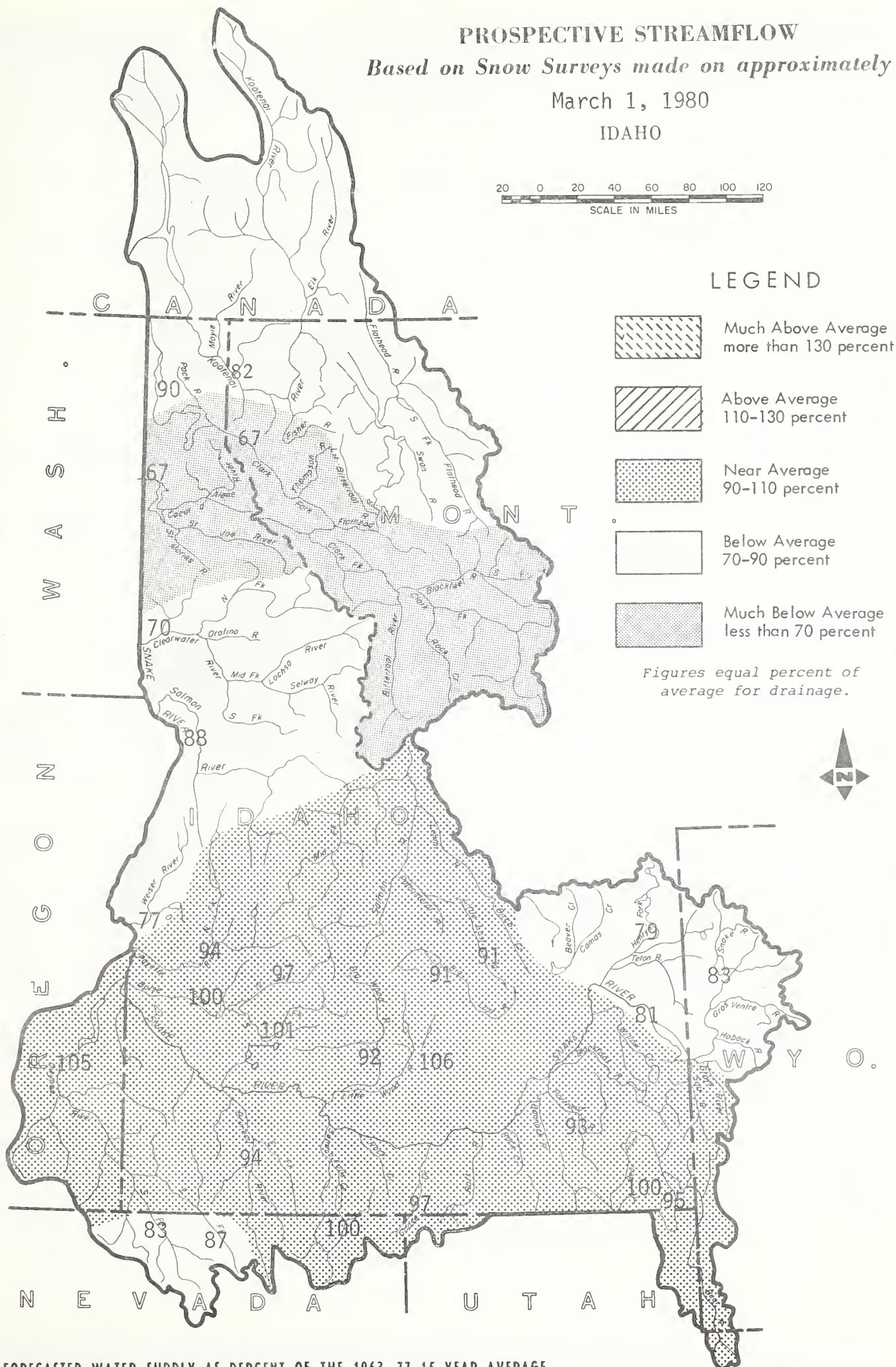
35	97	Mar-Sep	--	36
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Salmon Falls Creek

San Jacinto	(nr)	95	100	Mar-Sep	--	95
		90	100	Mar-Jul	--	90

Bruneau River

Hot Springs	(nr)	235	94	Mar-Sep	--	251
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## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD		
	FORECAST <sup>c</sup>		FORECAST PERIOD	THOUSAND ACRE FEET		
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>d</sup>	
<u>Little Lost River</u>						
Howe	(nr)	40	91	Apr-Sep	--	44
Wet Creek	(b1)	24	92	Apr-Jun	--	26
		38	92	Apr-Sep	--	41
<u>Big Lost River</u>						
Howell Ranch	(at)	205	91	Apr-Sep	--	225
		140	91	Apr-Jun	--	154
Mackay <sup>8/</sup>	(nr)	180	88	Apr-Sep	--	204
<u>Big Wood River</u>						
Magic Reservoir <sup>9/</sup>		295	92	Apr-Sep	--	319
Inflow		310	93	Mar-Jul	--	332
<u>Little Wood River</u>						
Carey	(nr)	115	106	Apr-Sep	--	107
		95	108	Apr-Jun	--	87
<u>Boise River</u>						
Twin Springs	(nr)	710	97	Apr-Sep	--	733
		655	97	Apr-Jul	--	676
Boise <sup>10/</sup>	(nr)	1660	100	Apr-Sep	--	1656
		1360	100	Apr-Jun	--	1360
		1540	100	Apr-Jul	--	1536
<u>South Fork</u>						
Anderson Dam <sup>11/</sup>	(at)	630	101	Apr-Sep	--	622
<u>Owyhee River</u>						
Gold Cr., Nev. <sup>12/</sup>	(nr)	20	87	Apr-Jul	--	23
Owyhee, Nev. <sup>12/</sup>	(nr)	66	83	Apr-Jul	--	80
Lake Owyhee		412	105	Apr-Sep	346	392
net inflow <sup>13/</sup>		561	110	Mar-Jul	548	510
<u>Payette River</u>						
Horseshoe Bend <sup>14/</sup>	(nr)	1750	94	Apr-Sep	--	1860
<u>North Fork</u>						
Cascade <sup>15/</sup>	(at)	535	95	Apr-Sep	--	564
Banks <sup>15/</sup>	(nr)	680	94	Apr-Sep	--	726
<u>Weiser River</u>						
Weiser	(nr)	430	77	Mar-Sep	--	558

## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST <sup>c</sup> Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND ACRE FEET Last Year

Salmon River  
Whitebird (at) 5820 88 Apr-Sep -- 7196

Clearwater River  
Spalding (at) 6070 70 Apr-Sep -- 8672

GREAT BASINBEAR RIVER

Harer (at) 314 95 Apr-Sep -- 332

Montpelier Creek

Montpelier (nr) 14 113 Apr-Sep -- 12.4

Cub River

Preston (nr)	50	100	Apr-Sep	--	50
	47	100	Apr-Jul	--	47

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

- 1/ Observed flow corrected for storage in Priest Lake.
- 2/ Observed flow corrected for storage in Coeur d'Alene Lake.
- 3/ Corrected for storage in Jackson Lake
- 4/ Corrected for storage in Jackson Lake and Palisades.
- 5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
- 6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
- 7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
- 8/ Observed flow corrected for storage in Mackay Reservoir.
- 9/ Combined flow Big Wood River near Bellevue and Camas Creek near Blaine.
- 10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
- 11/ Corrected for storage in Anderson Ranch Reservoir.
- 12/ Corrected for storage in Wild Horse Reservoir.
- 13/ From WPRS records of inflow.
- 14/ Corrected for storage in Cascade and Deadwood Reservoirs.
- 15/ Corrected for storage in Cascade Reservoir.

VALLEY PRECIPITATION 1/  
 Division Averages and Departures  
 In Inches

DRAINAGE DIVISIONS	Winter		Fall - Winter	
	February 1980 Observed	Departure <u>2/</u>	Nov. 78 - Feb. 80 Observed	Departure <u>2/</u>
Kootenai, Canada & U.S.	2.42	- .45	9.56	- 2.09
Flathead	1.38	- .36	6.79	- 2.41
Clark Fork	.91	- .36	4.98	- 1.80
Pend Oreille-Spokane	2.36	- .48	11.01	- 4.01
Upper Snake	1.84	- .01	6.99	- 1.60
Snake River Plain	1.07	+ .29	4.73	+ .43
Salmon-Payette-Boise	2.30	+ .55	8.56	- 1.50
Clearwater	2.63	- .24	10.88	- 4.04
Owyhee-Malheur	1.22	+ .37	4.74	- .08

1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Departure from 15-year (1963-1977) drainage division average.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

UPPER COLUMBIA RIVER BASINKOOTENAI RIVER

#Bear Mountain	5400	3/1	92	38.1	--	53.7*
Halverson Creek	4850	2/26	86	34.0	--	39.1*

PEND OREILLE - PRIEST RIVER

Bear Mountain	5400	3/1	92	38.1	--	53.7*
Benton Meadow	2370	2/27	16	4.8	7.0	6.4
Benton Spring	4900	2/27	37	12.6	17.5	17.7
#Mosquito Ridge (A)	5110	2/27	68	24.1	31.4	34.6
Schweitzer Bowl	4500	2/28	55	21.1	24.3	28.1*
Schweitzer Ridge	6200	2/28	104	42.8	30.8	40.3*

HAYDEN LAKE

Chilco Ridge	3650	2/26	6	2.2	10.0	--
Conie Ridge	3900	2/26	10	3.1	13.1	--
Corner Creek	3150	2/26	11	3.3	10.2	--
Sage Creek Saddle	4100	2/26	28	9.8	20.2	--

SPOKANE RIVER

Above Burke	4100	2/28	35	12.0	23.6	22.9*
Copper Ridge	4800	2/27	33	11.2	27.7	25.1
#Forty-nine Meadows	4840	2/29	47	14.9	23.4	27.2
Fourth of July Summit	3200	2/28	8	2.9	12.4	8.9
Granite Peak	6000	2/29	85	26.6	--	39.5*
Kellogg Peak (A)	5560	2/27	55	19.6	31.0	28.2*
Lookout	5120	2/28	62	20.6	27.8	31.0
#Lost Lake	6080	2/29	97	29.9	36.7	50.0*
Lower Sands Creek	3400	2/27	26	8.4	18.5	17.5*
Mosquito Ridge (A)	5110	2/27	68	24.1	31.4	34.6
Roland Summit (A)	5200	2/27	56	19.6	29.0	31.3
Sherwin	3200	2/27	17	5.7	15.7	13.3
Sunset (A)	5600	2/27	76	24.3	32.3	32.6*

LOWER SNAKE RIVER BASINPALOUSE RIVER

Crumarine Creek	3340	2/29	0	0.0	12.0	7.6
East Twin	4050	2/29	10	4.0	14.5	10.8
Howard Creek	3500	2/25	6	2.1	8.7	5.6*
Moscow Mountain	4360	2/29	23	8.2	19.2	15.6
West Twin	4250	2/25	10	3.6	13.8	9.4

(b) 1963-77, 15 year period. #Not located directly on this drainage. \*Estimated 1963-77 15 year average. (1) Aerial observation Water content estimated (SP) Pressure Pillon snow-water equivalent. (R) Radioactive Gage snow-water equivalent

## SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

CLEARWATER

Breezy Saddle	5000	2/29	51	15.8	24.0	--
Buck Meadows	5650	2/29	59	16.3	--	25.8*
Cayuse Airstrip	3500	2/29	22	5.1	12.2	12.0
Crater Meadows	6100	2/29	85	27.1	32.8	38.9
Crooked Fork	3600	2/25	25	7.5	12.2	12.7*
Elk Butte	5420	2/29	58	17.5	--	34.7
Fish Lake Airstrip	5650	2/29	80	24.7	31.0	36.3
Forty-nine Meadows	4840	2/29	47	14.9	23.4	27.2
Goat Lake	6500	2/29	96	29.7	--	42.1
#Granite Peak	6000	2/29	85	26.6	--	39.5*
Hemlock Butte	5500	2/29	87	27.7	35.1	43.6*
#Hoodoo Basin	Mont.	6000	2/24	97	37.2	42.3
#Hoodoo Creek	Mont.	5900	2/24	91	34.5	40.2
Kit Carson Pasture		4950	2/24	24	7.6	9.2
Lolo Pass		5240	2/25	61	21.5	30.7
Lost Lake		6080	2/29	97	29.9	36.7
Mountain Meadows		6300	2/29	46	12.0	--
#Nez Perce Pass	Mont.	6575	2/24	37	10.6	18.6
Pierce Ranger Station		3170	2/29	20	5.6	12.8
Savage Pass		6170	2/25	60	19.8	24.8
Shanghai Summit		4600	2/29	40	11.9	23.9
						24.1

WEBB CREEK

Kruse Meadows	4800	2/15	25	6.8	11.5	--
Soldier Meadow	4640	2/15	26	6.8	11.1	--
Webb Creek	4720	2/15	27	7.1	11.4	--

SALMON RIVER

#Banner Summit	7040	2/27	78	26.4	20.0	--
Big Creek Summit	6600	2/25	105	34.5	23.8	31.6
Borah (A)	8250	3/1	18	5.0	--	--
#Boulder Creek	5500	2/29	41	14.0	20.3	21.8
Brundage Mountain	7560	2/27	109	41.6	29.8	40.6*
#Deadwood Summit	6750	12/27	118	40.9	28.5	41.3*
Doublespring Pass	8400	3/1	34	9.6	7.6	8.7*
#Galena Summit	8780	2/26	63	19.0	13.5	20.6
#Gibbons Pass	Mont.	7100	2/27	52	16.6	18.9
Leatherman Pass (A)		9800	3/1	48	13.7	--
#Lemhi Pass	Mont.	7480	2/27	28	6.6	9.8
#Lemhi Ridge	Mont.	8100	2/27	30	7.7	10.3
Mill Creek Summit		8800	3/1	58	18.6	12.1
Moose Creek		6200	2/29	35	9.6	14.8
Morgan Creek		7580	3/1	37	10.4	9.6
Perreau Meadows		8000	2/29	44	12.2	12.4
						--

(b) 1963-77, 15 year period. \*Not located directly on this drainage. ^ Estimated 1963-77 15 year average. (A) Aerial observation Water content estimated (SP) Pressure Pillon snow-water equivalent. (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					Average %
Redfish Lake Flat	6550	2/28	38	11.9	7.6	8.9*
#Rock Flat Summit	5340	2/27	42	13.8	16.2	16.7
#Secesh Summit	6520	2/23	97	30.8	26.0	30.9*
#Squaw Flat	6240	2/24	65	20.4	--	--
#Squaw Meadow	5900	2/23	92	32.1	26.7	31.9
Twin Peaks (A)	9170	3/1	61	19.6	12.9	23.0*
Vienna Mine	8950	2/27	96	35.0	24.0	32.1
Williams Creek Summit	7800	2/29	32	9.1	9.2	11.1

LEMHI RIVER

Above Gilmore	8250	3/1	28	7.6	6.6	8.2
Aspen-Hall Pass (A)	8110	3/1	37	10.4	6.9	8.5*
Copes Camp	7500	3/1	29	7.4	6.0	6.6
Hall Creek	7560	3/1	27	6.9	4.6	4.8*
Meadow Lake	9200	3/1	44	12.6	13.7	16.5
Schwartz Lake	8500	3/1	38	10.7	8.5	10.8*

MIDDLE SNAKE RIVER BASIN - NORTHSIDELITTLE LOST RIVER

Fairview Guard Station	6750	2/27	16	5.4	5.4	4.2
Hilts Creek	8000	2/28	35	10.2	6.7	--
Lost Garfield	6600	2/27	14	4.0	4.6	3.7
Moonshine	7500	2/27	28	8.5	7.7	9.3
Sawmill Canyon	6900	2/27	26	7.0	7.1	6.9
Wet Creek Summit	7760	2/28	32	9.7	7.8	10.7

BIG LOST RIVER

Bear Canyon	7920	2/28	56	16.8	9.8	15.9
Copper Basin	7650	2/28	26	8.5	4.6	8.4
Dry Fork	7340	2/29	44	14.6	--	14.6*
Fishpole Lake	9350	2/28	68	23.2	10.8	17.3*
Iron Bog	7650	2/29	41	13.4	8.1	12.8*
Leadbelt	6800	2/29	32	9.8	5.8	8.6
#Leatherman Pass (A)	9800	3/1	48	13.7	--	20.2*
Lost-Wood Divide	7900	3/4	63	20.2	12.3	20.4*
Stickney Mill	7450	3/4	34	9.7	6.8	8.3

FISH CREEK

Iron Mine Creek	6370	2/28	36	11.1	10.4	9.9
Telfer Ranch	6000	2/28	25	9.2	7.8	7.8

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

LITTLE WOOD RIVER

#Bear Canyon	7920	2/28	56	16.8	9.8	15.9
Garfield Ranger Station	6560	2/29	36	11.5	7.8	9.8
Muldoon	6300	2/29	24	8.2	7.0	7.6
Swede Peak	7640	2/29	54	16.5	10.5	15.2

BIG WOOD RIVER

Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
Chimney Creek	6400	2/27	46	15.5	10.7	--
#Couch Summit	6850	2/28	61	19.0	9.9	16.9*
Dollarhide Summit	8400	2/27	69	22.6	15.0	21.1
Galena	7300	2/26	52	16.0	12.1	17.0
Galena Summit	8780	2/26	63	19.0	13.5	20.6
Graham Ranch	6280	2/26	45	13.5	9.0	12.8
Hyndman Creek	7440	2/28	49	14.3	9.5	--
#Lost-Wood Divide	7900	3/4	63	20.2	12.3	20.4*
Mascot Mine	7760	2/28	45	13.5	9.2	13.1
Mount Baldy	9000	2/28	66	18.6	11.6	18.4
Soldier Ranger Station	6100	2/28	36	12.1	8.5	11.5
#Vienna Mine	8950	2/27	96	35.0	24.0	32.1

CANYON CREEK

Bennett Mountain	6650	2/27	48	14.4	12.2	15.0*
#Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
Little Camas Flat	4950	2/27	16	5.2	5.1	5.9*

BOISE RIVER

Atlanta Summit	7500	2/27	92	29.9	22.4	31.2*
Bad Bear	5500	2/28	34	11.8	11.5	13.5
#Bennett Mountain	6650	2/27	48	14.4	12.2	15.0*
#Bogus Basin	6340	2/28	62	22.2	17.5	20.7
Bogus Basin Road	5520	2/28	6	2.3	8.5	5.8
#Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
#Chimney Creek	6400	2/27	46	15.5	10.7	--
Couch Summit	6850	2/28	61	19.0	9.9	16.9*
Deadman Gulch	5600	3/1	49	16.2	14.0	14.7*
#Dollarhide Summit	8400	2/27	69	22.6	15.0	21.1
Graham Guard Station	5690	2/27	40	13.5	12.0	--
Jackson Peak	7070	2/27	85	28.4	20.7	27.3
#Little Camas Flat	4950	2/27	16	5.2	5.1	5.9*
Moores Creek Summit	6100	2/28	82	29.5	21.7	28.6
Prairie	4800	2/27	11	3.7	5.2	5.8
#Soldier Ranger Station	6100	2/28	36	12.1	8.5	11.5
Trinity Mountain	7780	2/27	105	38.8	26.6	38.2
#Vienna Mine	8950	2/27	96	35.0	24.0	32.1

(b) 1963-77, 15 year period. #Not located directly on this drainage. <sup>(1)</sup> Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated (SP) Pressure Pillote snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

PAYETTE RIVER

Banner Summit	7040	2/27	78	26.4	20.0	--
Bear Basin	5350	2/27	47	14.8	--	--
#Big Creek Summit	6600	2/25	105	34.5	23.8	31.6
Bogus Basin	6340	2/28	62	22.2	17.5	20.7
#Brundage Mountain	7560	2/27	109	41.6	29.8	40.6*
Cozy Cove	5400	2/27	43	14.4	13.0	15.2*
Crawford Ranger Station	4800	2/25	19	7.0	5.8	7.7
#Deadman Gulch	5600	3/1	49	16.2	14.0	14.7*
Deadwood Airstrip	5440	2/27	43	14.1	13.0	14.4
Deadwood Summit	7000	2/27	118	40.9	28.5	41.3*
#Jackson Peak	7070	2/27	85	28.4	20.7	27.3
Lake Fork	6000	2/24	39	10.9	11.9	14.6
Rock Flat Summit	5340	2/27	42	13.8	16.2	16.7
Secesh Summit	6520	2/23	97	30.8	26.0	30.9*
#Squaw Flat	6240	2/24	65	20.4	--	--
Squaw Meadow	5900	2/23	92	32.1	26.7	31.9
Tripod Summit	5200	2/25	48	15.2	13.8	16.7

WEISER RIVER

Boulder Creek	5500	2/29	41	14.0	20.3	21.8
Placer Creek	6000	2/27	48	13.4	12.3	16.5
Squaw Flat	6240	2/24	65	20.4	--	--

MANN CREEK

Bear Saddle	6180	2/28	58	22.0	--	--
Mann Creek	6080	2/28	52	19.4	19.2	22.5*
Robinson Creek Ridge	6220	2/28	48	19.2	17.2	18.4*
Sturgill Ridge	6680	2/28	64	23.8	25.2	26.1*
Thorson Cabin	5320	2/28	34	14.0	14.4	12.3*

MIDDLE SNAKE RIVER BASIN - SOUTHSIDERAFT RIVER

Boy Scout Camp	7750	2/27	48	15.0	11.3	12.8
Clear Creek Meadows	Utah	9050	2/27	53	16.8	19.6
Howell Canyon		7980	2/27	66	20.9	17.7
Indian Grove		7560	2/27	42	12.4	11.0
Logger Springs		8100	2/27	54	16.6	14.5
One Mile Summit	Utah	7330	2/27	20	5.2	6.6
Sublett		6000	2/27	30	9.3	11.3
						10.1

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	Last Year
NAME	Elevation					

GOOSE CREEK

Badger Gulch		6660	2/27	41	12.9	11.4	10.7
Bostetter Ranger Station		7500	2/27	56	17.5	17.6	17.1
#Indian Grove		7580	2/27	42	12.4	11.0	--
#Logger Springs		8120	2/27	54	16.6	14.5	--
Vi Pont	Utah	7670	2/27	47	14.8	15.5	12.9*

SALMON FALLS CREEK

#Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
Cedar Creek		7000	3/1	28	8.8	12.3	9.3
Deadline		6900	3/1	73	25.2	22.4	18.8
#Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Goat Creek	Nev.	8800	3/1	53	17.5	13.0	15.7
#Hummingbird Springs	Nev.	8940	3/1	71	22.4	16.7	19.5
Magic Mountain		6700	3/1	53	17.3	20.3	16.4
#Pole Creek Rgr. Sta.	Nev.	8330	3/1	54	17.8	17.6	18.6
Shoshone Basin		5740	3/1	19	6.7	11.0	5.3
Wilson Creek		7500	3/1	40	11.5	14.5	11.0

BRUNEAU RIVER

Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Hummingbird Springs	Nev.	8940	3/1	71	22.4	16.7	19.5
Pole Creek Rgr. Sta.	Nev.	8330	3/1	54	17.8	17.6	18.6
#Seventy-six Creek	Nev.	7100	3/1	41	11.6	13.8	10.4

OWYHEE RIVER

Antelope Ridge		6150	2/26	17	6.0	8.9	6.9*
#Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
#Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Mud Flat		5720	2/26	19	6.5	8.6	6.0*
#Seventy-six Creek	Nev.	7100	3/1	41	11.6	13.8	10.4
Silver City		6400	2/26	48	16.3	16.6	13.7
South Mountain		6340	2/26	48	15.6	15.0	11.6

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					Average /

UPPER SNAKE RIVER BASINCAMAS-BEAVER CREEKS

Camp Creek	6800	2/28	27	6.0	7.3	9.8
Kilgore	6200	2/27	30	8.6	10.5	10.6

HENRYS FORK RIVER

Big Springs	6400	2/26	49	14.4	18.1	18.7
Grassy Lake	Wyo. 7230	2/27	75	24.3	34.3	30.6
Island Park	6290	2/26	44	12.9	16.4	15.1
Sawtell Mountain	8720	2/26	86	28.6	23.6	28.4*
Targhee Pass	7000	2/27	33	9.0	11.8	13.6*
Valley View	6740	2/27	40	11.7	14.9	15.6
White Elephant	7700	2/26	69	21.2	18.7	18.4*

TETON RIVER

Darby Canyon	Wyo. 8250	2/25	54	16.7	19.6	19.8*
Freds Mountain	Wyo. 8150	2/28	59	18.0	20.9	16.9*
Indian Meadows	Wyo. 8240	2/27	82	25.7	32.3	30.9*
Jackpine Creek	Wyo. 7350	2/27	54	15.5	21.0	19.6*
McRenolds Reservoir	6800	2/27	48	13.8	19.8	17.4*
Phillips Bench	Wyo. 8200	2/26	70	20.7	30.4	23.2*
Pine Creek Pass	6750	2/28	37	10.7	20.0	15.6
State Line	6650	2/28	34	10.1	16.3	12.7
Teton Pass W.S.	Wyo. 8400	2/26	61	17.4	28.3	21.0*

WILLOW CREEK

Aspen Grove	6500	2/28	43	13.1	11.3	10.7*
Blue Ridge	6800	2/29	55	18.1	14.3	--
Bone	6200	2/29	21	7.2	9.9	7.4*
Brockman Station	6430	2/29	29	9.3	13.0	--
Hell Creek	7100	2/28	45	12.6	15.5	--
Mud Creek	7150	2/29	67	19.2	11.9	--
Sheep Mountain	6570	2/29	38	11.7	11.2	12.5*
Tex Creek	6650	2/28	32	9.0	10.5	8.5*

BLACKFOOT RIVER

Austin Bros. Ranch	6400	3/3	28	9.4	11.0	8.3
Johnson Creek	6730	3/3	46	13.6	--	--

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					
Slug Creek Divide	7230	2/27	54	16.7	14.8	14.8
Somsen Ranch	7000	3/3	48	14.4	17.8	12.7
Sulphur Peak	7070	3/3	51	15.5	--	--
Wood Canyon Divide	7450	3/3	56	16.9	--	--

PORTNEUF RIVER

Beaverdam	6120	3/1	27	8.8	--	--
Dempsey Creek	6100	3/1	40	12.0	11.6	11.0
East Creek	7000	3/1	34	11.1	--	--
Johnson Creek	6730	3/3	46	13.6	--	--
Lower Pebble	5800	3/1	42	12.6	15.5	12.3*
Mink Creek	6300	3/2	55	18.0	14.1	15.5
Pebble Creek	6550	3/1	52	16.5	15.4	14.5
Sedgwick	7850	3/1	58	16.9	--	--
#Sulphur Peak	7070	3/3	51	15.5	--	--
#Wood Canyon Divide	7450	3/3	56	16.9	--	--

SNOW		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average /

### GREAT BASIN

#### BEAR RIVER

Emigrant Summit	7380	2/27	72	22.8	23.3	21.7
Emigration Canyon	6500	2/27	36	11.3	12.4	9.7

#### MONTPELIER CREEK

Giveout	6840	2/27	43	12.1	12.6	11.1
Little Beaver	6970	2/27	46	13.2	15.6	14.0
Lower Home Canyon	7640	2/29	48	13.1	13.2	12.2*
Montpelier Creek	6570	2/27	27	8.7	10.4	7.5
Upper Home Canyon	8560	2/29	71	20.7	20.0	19.9*
Whiskey Flat	6960	2/27	32	9.8	9.0	8.5

#### MINK CREEK

Christensen Ranch	5400	2/26	29	10.1	10.9	7.9
Dry Basin	7900	2/26	87	28.9	26.9	24.2*
#Emigrant Summit	7380	2/27	72	22.8	23.3	21.7
Horseshoe Basin	8000	2/26	79	27.6	22.5	22.0*
Liberty Spring	8600	2/26	97	34.0	35.0	32.7
Strawberry Creek	5800	2/27	29	9.6	13.6	9.6
Strawberry Mink Divide	6800	2/26	59	21.4	22.0	18.7

#### CUB RIVER

Cub River Rgr. Sta.	5400	2/26	25	9.1	11.5	8.4
#Franklin Basin	8000	2/26	68	23.3	22.6	22.7
Willow Flat	6100	2/26	43	15.6	19.9	13.9
Worm Creek	6660	2/26	57	19.5	19.7	--

#### MALAD RIVER

Cliff Canyon	7200	2/26	23	8.2	8.6	--
Daniels Creek	6400	2/26	19	7.5	7.7	--
Dry Creek Flat	6480	2/26	27	10.6	10.7	7.4
Lower Elkhorn	7000	2/26	45	16.9	14.5	12.7*
Oxford Mountain	6800	2/26	34	11.6	13.1	9.4
Upper Elkhorn	7100	2/26	61	20.0	18.2	16.4*



# Agencies and Organizations Cooperating in Idaho Snow Surveys

## GOVERNMENT AGENCIES

### States:

Idaho Department of Water Resources  
State of Idaho Department of Fish and Game  
University of Idaho  
Idaho State University  
Montana Agricultural Experiment Station  
Montana State Water Conservation Board  
Montana Cooperative Snow Surveys  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon Cooperative Snow Surveys  
Oregon State Engineer and Corps of  
State Watermasters  
Utah Cooperative Snow Surveys  
Wyoming Cooperative Snow Surveys

### Federal:

U.S. Army Engineers

U.S. Department of Agriculture  
Forest Service  
Agricultural Research Service  
Statistical Reporting Service

U.S. Department of Commerce  
NOAA, National Weather Service

U.S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Water Resources Division, Geological Survey  
National Park Service  
Bureau of Land Management

## PUBLIC UTILITIES

The Montana Power Company  
Washington Water Power Company  
Idaho Power Company  
Utah Power and Light Company

## ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District  
Blaine Soil Conservation District  
Boise Project Board of Control  
Idaho Water District #01  
Little Wood River Irrigation District  
Mann Creek Irrigation District  
Salmon Falls Creek Irrigation Company  
Twin Falls Soil Conservation District  
Big Wood Irrigation Company  
Owyhee Project - North & South Board of Control  
Valley Soil Conservation District  
Portneuf Soil and Water Conservation District  
East Cassia Soil and Water Conservation District  
West Cassia Soil and Water Conservation District  
Camas Soil and Water Conservation District

*Other organizations and individuals furnish valuable information for  
snow survey reports. Their cooperation is gratefully acknowledged.*

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## FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

*"The Conservation of Water begins  
with the Snow Survey"*

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